CLAIMS

1. A heat shrinkable film comprising a resin composition comprising the following components (A), (B) and (C), obtained by orientation at least in monoaxial direction, and having a heat shrinkage ratio at 80°C for 10 seconds of at least 20%:

(A) 50 to 95 mass% of a block copolymer comprising an aromatic vinyl compound and a conjugated diene in a proportion of the aromatic vinyl compound of from 50 to 90 mass%, and having a micro phase separation structure comprising a soft phase and a hard phase,

(B) 5 to 50 mass% of a styrene type polymer having a syndyotactic structure, and

(C) 0 to 45 mass% of a styrene type polymer different from the components (A) and (B).

2. The heat shrinkable film according to Claim 1, wherein the block copolymer as the component (A) has a random copolymer block portion of the aromatic vinyl compound and the conjugated diene in its structure.

3. The heat shrinkable film according to Claim 1 or 2, wherein the component (A) has the following characteristics:

(1) the loss tangent (tanδ) has one or more maximum values within a temperature range of at least 65°C and less than 100°C in the dynamic viscoelasticity spectrum,

(2) the highest value of the maximum values corresponding to (1) is within a range of at least 1.5

and less than 4.0,

(3) the loss tangent at a temperature lower by 10°C than the temperature for the highest maximum value among the maximum values corresponding to (1), is at most 40% of the highest maximum value,

(4) the loss tangent at a temperature lower by 30°C than the temperature for the highest maximum value among the maximum values corresponding to (1), is at most 10% of the highest maximum value, and

(5) the loss tangent at 30°C is within a range of at least 0.01 and less than 0.4.

4. The heat shrinkable film according to any one of Claims 1 to 3, wherein the resin composition constituting the heat shrinkable film has the following characteristics:

(1) the loss tangent (tanδ) has one or more maximum values within a temperature range of at least 65°C and less than 100°C in the dynamic viscoelasticity spectrum,

(2) the highest value of the maximum values corresponding to (1) is within a range of at least 1.5 and less than 4.0,

(3) the loss tangent at a temperature lower by 10°C than the temperature for the highest maximum value among the maximum values corresponding to (1), is at most 40% of the highest maximum value,

(4) the loss tangent at a temperature lower by 30°C than the temperature for the highest maximum value among

the maximum values corresponding to (1), is at most 10% of the highest maximum value, and

(5) the loss tangent at 30°C is within a range of at least 0.01 and less than 0.4.

5. The heat shrinkable film according to any one of Claims 1 to 4, which has a spontaneous shrinkage ratio at 40°C for 7 days of at most 5%.

6. The heat shrinkable film according to any one of Claims 1 to 5, which contains a styrene type polymer having a random copolymer block portion of an aromatic vinyl compound and a conjugated diene in its structure as the styrene type polymer as the component (C).

7. The heat shrinkable film according to any one of Claims 1 to 6, which contains a rubber-modified polystyrene containing dispersed rubber particles having a volume average particle size of at most 2 μm as the styrene type polymer as the component (C).

8. The heat shrinkable film according to any one of Claims 1 to 7, which contains a styrene type polymer having a random copolymer structure of styrene and a meth(acrylate) in its structure as the styrene type polymer as the component (C).

9. The heat shrinkable film according to any one of Claims 1 to 8, wherein the styrene type polymer having a syndyotactic structure as the component (B) has a crystalline melting point within a range of from 160°C to 260°C, and a crystalline melting energy of at least 1 J/g.

10. The heat shrinkable film according to any one of Claims 1 to 9, which has a crystallinity of from 3 to 80% and a cold crystallization temperature of from 120 to 170°C derived from the component (B).

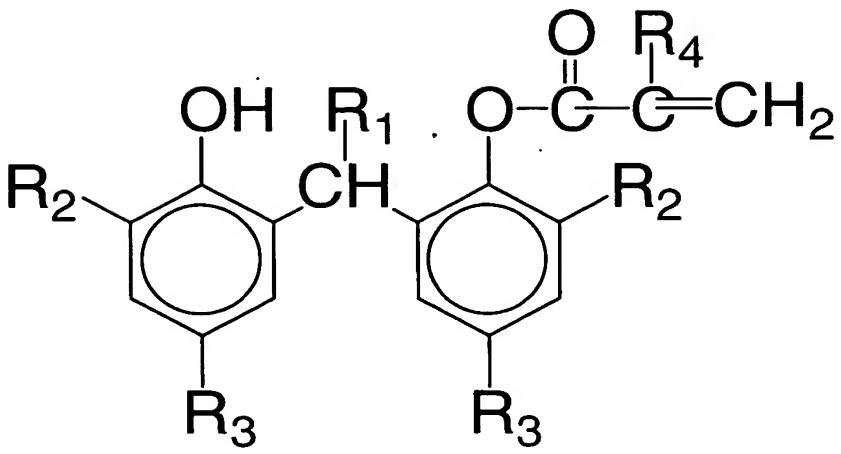
11. The heat shrinkable film according to any one of Claims 1 to 10, which has an internal haze of at most 30%.

12. The heat shrinkable film according to any one of Claims 1 to 11, wherein the ratio of the relaxation stresses in the orientation direction of the film and in a direction at right angles therewith, is from 1.2 to 10.

13. The heat shrinkable film according to any one of Claims 1 to 12, wherein no holes of 1 mm or larger are confirmed after the film is left at rest on a hot plate of 120°C for 120 seconds so that the film and the hot plate are in contact with each other.

14. The heat shrinkable film according to any one of Claims 1 to 13, wherein the styrene type polymer having a syndyotactic structure as the component (B) forms a domain in the resin composition.

15. The heat shrinkable film according to any one of Claims 1 to 14, which contains an acrylate type compound (D) represented by the following formula in an amount of from 0.1 to 3 parts by mass per 100 parts by mass of the total amount of the components (A), (B) and (C):



wherein R_1 represents hydrogen or a C_{1-3} alkyl, each of R_2 and R_3 which are independent of each other, represents a C_{1-9} alkyl, and R_4 represents hydrogen or methyl.

16. The heat shrinkable film according to any one of Claims 1 to 15, which contains a phosphorus type stabilizer in an amount of from 0.1 to 1 part by mass per 100 parts by mass of the total amount of the components (A), (B) and (C).

17. The heat shrinkable film according to any one of Claims 1 to 16, which contains a phenol type stabilizer (except the component (D)) in an amount of from 0.1 to 1 part by mass per 100 parts by mass of the total amount of the components (A), (B) and (C).

18. The heat shrinkable film according to any one of Claims 1 to 17, which is an expanded product.

19. A heat shrinkable film having a multilayer structure, which has at least one layer of the heat shrinkable film as defined in any one of Claims 1 to 18.

20. The heat shrinkable film having a multilayer

structure according to Claim 19, wherein at least one of the outermost layers is made of a resin composition containing at least one copolymer selected from a styrene/butadiene block copolymer, a styrene/isoprene block copolymer and a styrene/meth(acrylate) type copolymer.

21. The heat shrinkable film having a multilayer structure according to Claim 19 or 20, wherein at least one of the outermost layers contains a rubber-modified polystyrene containing dispersed rubber particles having a volume average particle size of at most 2 μm, in an amount of from 0.1 to 10 mass%.

22. The heat shrinkable film having a multilayer structure according to any one of Claims 19 to 21, wherein the multilayer structure consists of three layers, the inner layer is the heat shrinkable film as defined in any one of Claims 1 to 18, and the proportion of the thickness of the three layers is 1 to 30:98 to 40:1 to 30 (the total is 100).

23. The heat shrinkable film having a multilayer structure according to any one of Claims 19 to 21, wherein the multilayer structure consists of two layers, one layer is the heat shrinkable film as defined in any one of Claims 1 to 18, and the proportion of the thickness of the two layers is 5 to 95:95 to 5 (the total is 100).

24. A process for producing the heat shrinkable film as

defined in any one of Claims 1 to 23, which comprises an orientation process, wherein the cast roll surface temperature is from 30 to 100°C.

25. The process for producing the heat shrinkable film according to Claim 24, wherein in the orientation process, the orientation temperature is within a range of from 50 to 100°C.

26. The process for producing the heat shrinkable film according to Claim 25, wherein the heat set temperature after completion of the orientation is within a range of from 50 to 100°C and at most the orientation temperature.

27. The process for producing the heat shrinkable film according to Claim 26, wherein the draw ratio is from 1.05 to 2.0 times in the longitudinal direction and from 2.1 to 10 times in the lateral direction in simultaneous or sequential biaxial orientation process.

28. A packaging label comprising the heat shrinkable film as defined in any one of Claims 1 to 23.

29. A container packaged with the heat shrinkable film as defined in any one of Claims 1 to 23 or the packaging label as defined in Claim 28.